



Benin Household Energy Project

October 2001 — December 2004

At the end of 1998, EnterpriseWorks/Benin conducted research on the Beninese market for more fuel-efficient charcoal-burning stoves. Charcoal consumption in 150 households was monitored, and the results of this survey confirmed that the ceramic-lined Jiko stove (previously developed and marketed in Kenya and Senegal) consumes considerably less fuel than the other charcoal-burning stoves then used in Benin, yielding average charcoal savings of about 40 percent.



Following the successful market study, stove promotion activities commenced in 1999 as an extension of EWW's irrigation and palm oil project. Spurred by the program's success in nearby Senegal and Mali, project staff hastened to launch activities, initially establishing a source for ceramic liners in neighboring Togo until a reliable Beninese ceramist could be identified.

Locally branded in Benin as the Nansu stove (meaning "husband of the princess" in the local Fon language), project staff deftly targeted women with its slogan: *economique et beau, comme un bon mari* (thrifty and handsome, like a good husband). Driven by this aggressive marketing strategy and the stove's powerful financial savings, Beninese consumers quickly bought over 8,000 stoves in the first year of the project. By the end of 2001, sales topped 26,000 - more than double the project's goal. To build upon such initial promise, the project was extended under a new grant from USAID in 2001.

Economic Participants

31,284 --- in 2001

Enterprises Assisted

167 --- in 2001

Total Monetary Benefits

\$706,217 --- in 2001

Cumulative TMB

\$797,931

Project Budget

\$500,000

Primary Funders

USAID/Benin

OBJECTIVES

- Sale of 108,000 stoves over four years.
- To reduce considerably household fuel expenses while contributing to the protection of the environment and Beninese forests.
- Meet unanticipated demand by boosting the production capacity of the local ceramist and continually ensuring quality craftsmanship.

PROGRESS REPORT

Impacts: By the end of 2001, nearly 31,000 stoves had been sold to Beninese charcoal consuming households. Stove sales had generated almost \$153,000 in increased income to small-scale metal artisans. Due to the improved efficiency of the stoves, households saved over

\$706,000 in charcoal expenditures in 2001, reducing charcoal consumption by 9,520 MT, and averting nearly 31,300 MT of carbon dioxide emissions.

Stove production diversifies and increases. After it was determined that there was an increased demand for stove liners, EW/Benin tended offers for a new manufacturer. The offer was advertised and one was chosen with vast experience in ceramics in Ghana and Nigeria. Dongo-Yaro Ceramics (DYC) in Grand Popo became Benin's second producer of Nansu Stove liners. Sixty new Nansu Stove retailers were recently recruited and these along with the more than 300 other active retailers were supported in their efforts with brochures, stickers, t-shirts, calendars and other marketing tools. Ten tinsmiths were trained to produce two new Nansu Stove models, the Daho Nansu, which is 50% larger than the original stove, and the Tchigan Nansu, which is the same size as the original but is made out of stainless steel. The larger stove will accommodate the many households that requested restaurant-sized stoves from EW/Benin.

Quality upheld. EW/Benin provided quality control of the Nansu Stoves produced by project tinsmiths. In general, the quality is good although cracking in the stove's cement base has been frequently discovered. This cracking is the result of the tinsmiths' attempts to save on cement costs, using too large of a percentage of ash in the concrete mixture. The result is a fragile layer of cement that cracks and breaks when moved roughly. Tinsmiths are being advised to improve this part of their work.